

### **REMARKS/ARGUMENTS**

Claims 1-26 are pending in this application with Claims 1, 12 and 20 independent. By this Amendment, only Claims 21-26 are added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claims 21-23 are added to recite that the at least one data storage is at least one data memory chip. Claims 24-26 are added to recite that the plurality of data includes a plurality of data bits. Support for the amendment is found in the description, for example, at page 5, paragraph 2, lines 18-21. No new matter is added.

### **EXAMINER INTERVIEW**

Applicants acknowledge the Examiner's courtesies extended the Applicants' representative during the May 11, 2009 telephonic interview. The substance of the interview is reflected in the remarks set forth below.

### **SMOLLETT, ET AL.**

Claims 1-5, 7-8, 10, 12-13, 15 and 16 stand rejected under 35 U.S.C. 102(b) over Smollett, et al. (U.S. Patent No. 3,292,424). Claims 6, 9, and 19 stand rejected under 35 U.S.C. §103(a) over Smollett, et al. These rejections are respectfully traversed for at least the reasons set forth below.

The Examiner asserts that Smollett discloses a cryostorage device 22, a data storage device 69, a receptacle device 77, and a sample chamber 82 as recited in the claims. The Examiner also asserts that the features of Claims 6, 9 and 19 missing in Smollett are an obvious implementation of a known feature. The Examiner's assertions are respectfully traversed, at

least because Smollett does not disclose or teach the following features recited in the independent claims:

- a. a data memory chip adapted to store a plurality of data;
- b. a sample chamber being directly attached to the data storage device; and
- c. the sample chamber being attached to the data storage device in a flexible and movably hanging manner.

Regarding the claimed data storage adapted to store a plurality of data, during the interview, the Examiner conceded that the relay 69 is simply an electrical switch that opens and closes under the control of the thermal regulator 66 to cause the solenoid 63 to change the position of the valve 60. The Examiner points out that the electrical relay 69 still stores “plurality of data make on the valve 60 having a store data and to make off the valve 60 with a separate data than to on the” valve. That is, even though the relay 69 may only store one bit of data, the Examiner is reading the claimed plurality of data as one data for a value of “one” and another data for a value of “zero”. This assertion is respectfully traversed.

The Applicants and Examiner agree that it is clear that the relay can have one of two conditions. Yet, if the conditions are considered as “data”, the relay 69 can store only one of both conditions. That is, the relay 69 cannot simultaneously store both conditions “on” and “off”. Therefore, the relay 69 represents a single condition, *i.e.*, a single data only. The single data may have different values “one or zero”, but it is never possible to store both “one” and “zero” at any time. Accordingly, the relay 69 cannot store “or represent” a plurality of data.

Regarding the claimed sample chamber being directly attached to the data storage device,

the Examiner has accepted that the relay 69 is not directly attached to the at least one data storage device. Therefore, Smollett cannot anticipate the claims.

The Examiner continues that the chamber 82, including chambers 15 and 13 are kept at the same temperature during test operation. Column 5, lines 31-36. The Examiner asserts that Smollett discloses thermal couples provided in chamber 13, in container 70 and in chamber 15 to check the temperature. The Examiner then asserts that it is therefore apparent that the thermal couple directly senses the temperature of sample 72 in the container 70 that flows through the chamber 82 having the same temperature because both the chambers 13 and 15 are maintained at the same temperature. From that, the Examiner concludes that it is apparent that the switch 66 is sensing the temperature of chamber 15. According to the Examiner, it is therefore sensing the temperature of chamber 13, which indicates it is sensing the temperature of sample 72. The Examiner's assertions are respectfully traversed.

First, Fig. 1 clearly shows that chambers 15 and 13 are not part of the duct cable 82. Second, the chambers 13 and 15 are maintained at the same temperature during only a portion of the test operation, in particular, during the set-up phase of the test operation before the actual testing begins. Subsequently, during the test operation, the temperature of the air chamber 15 is lowered as desired for testing purposes of the test fuel. See column 5, lines 36 – column 6, line 4.

A more complete reading of the reference indicates that the purpose of Smollett is to test the lowered temperature pumpability of hydrocarbon oils. As part of this process, oil is pumped from the reservoir 13 through the duct cable transfer tube 82 that is placed in a zone (chamber 15) having a different temperature, usually at least about 1° F colder than the temperature zone in

which the reservoir is held. While pumping, the chamber 15 is maintained at a lower temperature than the reservoir, in particular at least from about 1° F to temperatures even more than 50° F colder than the reservoir. This temperature differential may represent, for example, the maximum expected temperature drop over a relatively short period of time in the field, for example, an over night temperature drop. See column 1, lines 62 – column 2, line 23. Therefore, chambers 15 and 13 are not maintained at the same temperature during operation, as asserted by the Examiner.

Moreover, thermocouples 39 located in the chamber 13, chamber 15, and the reservoir 70 do not indicate that the chamber 82 has the same temperature as the chambers 13 and 15. The thermocouples are merely provided to keep a check on the temperatures, i.e., more than one temperature. See column 3, lines 26-29. In fact, Smollett provides independent temperature controls for the sample reservoir in the duct in which the sample is pumped, to provide experimental versatility advantageous to the invention. See column 2, lines 66-69. In fact, the invention test results from Smollett shown at the bottom of column 6 shows that the temperature in the reservoir 70 is different in all tests, as desired, than the temperature in the chamber 15.

Therefore, the thermal regulator switch 66 that is sensing the temperature of the chamber 15 is clearly not sensing the temperature of the duct cable 82 or of the sample 72. In fact, within the chamber 15, the sample duct 77 assumes a configuration suitable for heat exchange with cooler materials in the second chamber. This would not be the case if the temperature of the chamber 15 was the same as the temperature in the reservoir 70 as asserted by the Examiner.

Further, a skilled artisan would not have attached the sensor of Smollett to the duct cable 82 because the sensor would not work for its intended purpose of taking the temperature of the

chamber. If the temperature sensor of Smollett were extended to directly attach to the cable 82, the sensor could not accurately measure the chilled air temperature in the chamber 15, and would not work to switch the valve 60 based on a comparison between the chamber temperature and a threshold temperature because the sensor's reading would be raised by the temperature of the cable 82 and the sensor would thus report an artificially high temperature as the chamber temperature.

Accordingly, Smollett does not disclose a sample chamber being directly attached to the data storage device, and therefore does not anticipate the claims. Moreover, it would not have made any technical sense to directly attach the relay 69 - which does not represent the claimed data storage - to the duct cable 82, which is asserted by the Examiner as the claimed sample chamber. The relay 69 is connected with a thermal regular switch 66, which is connected with a sensor. There are three intermediate components, namely the switch 66, the sensor and the chilled atmosphere of the chamber 15 between the relay 69 and the duct cable 82. Moreover, Smollett clearly sets forth that during the testing, the duct cable 82 is providing for heat exchange with the cooler chamber 15. Therefore, the duct cable 82 and chamber 15 have different temperatures during the actual testing of the test fuel. Accordingly, Applicants respectfully submit that clearly there is no direct attachment or suggestion for direct attachment between a sample chamber and a data storage device as recited in the independent claims.

Regarding the feature of the sample chamber being attached to the data storage device in a flexible and movably hanging manner, the Examiner asserts that the relay 69 is hanging from the wall 20 of the chamber 15, and would therefore be hanging from the duct cable 82 if attached to the cable, in a flexible and movably hanging manner, since the electric leads 68 are flexible.

The Examiner's assertions are respectfully traversed. Applicants respectfully submit that a hanging relay 69 is not disclosed in the Smollett reference. Further, there is no technical reason on the basis of which a skilled person would provide a hanging relay independently or based on Smollett to meet this feature of the claim without the impermissible use of hindsight.

In an effort to clearly set forth the recited at least one data storage device, the independent claims are amended to recite that the previously recited at least one data storage is at least one data memory chip. In addition to the features discussed above in the claims missing from Smollett, Smollett also does not disclose at least one data memory chip as recited in the independent claims.

Due to any of reasons set forth above, Smollett does not disclose the features recited in independent Claims 1, 12 and 20, or their dependent Claims 2-5, 7, 8, 10, 13, 15 and 16. Withdrawal of the rejection of the claims under 35 U.S.C. §102(d) is respectfully requested.

### **35 U.S.C. §103 CLAIM REJECTIONS**

Claims 6, 9 and 17-19 stand rejected under 35 U.S.C. §103(a) over Smollett. This rejection is respectfully traversed for at least the reasons set forth below.

The Examiner admits that Smollett does not disclose features of the rejected claims, and asserts that the difference is merely an obvious duplication, and obvious implementation or an obvious choice. However, Smollett does not teach or suggest the features discussed above regarding the rejection of Claims under 35 U.S.C. §102 for independent Claims 1 and 12, Claims 6 and 9 depend from Claim 1 and Claims 17-19 depend from Claim 12. Therefore, these claims are also believed to be allowable over Smollett at least to the distinctions discussed above.

Withdrawal of the rejection of the claims under 35 U.S.C. §103 is respectfully requested.

Claim 14 stands rejected under 35 U.S.C. §103(a) over Smollett in view of Takiue (U.S. Publication No. 2002/0007256 A1). This rejection is respectfully traversed for at least the reasons set forth below.

The Examiner admits that Smollett does not disclose measured and reference data and asserts that it would have been obvious to modify Smollett in view of the process center 32 of Takiue to obtain the desired analysis of the data. However, assuming, *en arguendo*, that the references could be combined, the combination would not have resulted in the features discussed above that are recited in Claim 12, and missing in Smollett. That is, Takiue does not teach at least one data memory chip adapted to store a plurality of data, at least one sample chamber being directly attached to the at least one data storage device, and the at least one sample chamber being attached to the at least one data storage device in a flexible and movable hanging manner as recited in independent Claim 12, from which Claim 14 depends. Therefore, Claim 14 is believed to be allowable over the combination of references. Withdrawal of the rejection of Claim 14 under 35 U.S.C. §103(a) is respectfully requested.

**Claim 11**

Applicants resubmit that Claim 11 is not rejected or discussed in the Office Action. Applicants further note that Claim 11 has never been rejected over prior art, and thus believe the Examiner agrees that Claim 11 recites allowable subject matter above the subject matter recited in its independent Claim 1. Confirmation of the indication of allowable subject matter is respectfully requested.

**CONCLUSION**

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

CAESAR, RIVISE, BERNSTEIN,  
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Date: July 23, 2009

Signature: 

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